

GRIDSCAN® AO-1

ANALOG OUTPUT MODULE



GRIDSCAN Analog Output Module

The GSAO-1 Analog Output Module is an accessory for the GRIDSCAN 5000 Series of H2scan hydrogen sensors. When paired with the GRIDSCAN hydrogen sensor, it provides a 4-20 mA analog signal equivalent of the dissolved hydrogen gas in the transformer oil or gas space. Rated for a wide hydrogen and temperature range, the GRIDSCAN 5000 Series with the GSAO-1 accessory leads the industry in ease of retrofitting a hydrogen sensor package to a variety of process monitoring and safety solutions.

- The accuracy of the GRIDSCAN hydrogen measurement is not degraded
- Seamless and rapid integration with SCADA and legacy systems (no protocol mapping required)
- It can drive local displays and annunciators
- Uses available signal cabling between transformer cabinet and control room
- Provides air-gapped and constant information for the most demanding cybersecurity requirements
- Automatically programs the GRIDSCAN sensor when first connected (no computers required)
- Local LED display with diagnostic alert
- Rugged IP68 enclosure with wide operating temperature makes the GSAO-1 suitable for all outdoor applications
- Small and unobtrusive form factor simplifies installation

Complement Your Monitoring Program with the GSAO-1

Fast Time to Value: Hours, not weeks or months

Seamless Integration: Connects to SCADA and legacy systems with industry standard 4-20 mA

Cost-Effective: Minimizes complexity and uses the existing infrastructure

Rugged and Reliable: Weatherproof, rugged enclosure and robust design for harsh substation environments

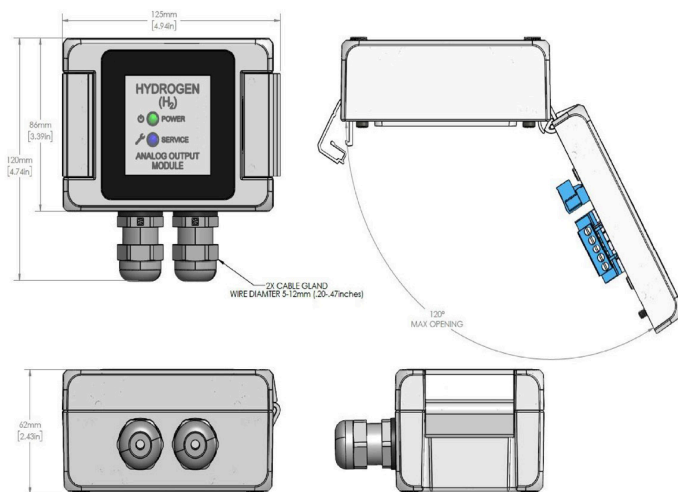
Easy Installation: "Plug-and-play" connectivity with H2scan sensors. Configures without a computer for immediate operation



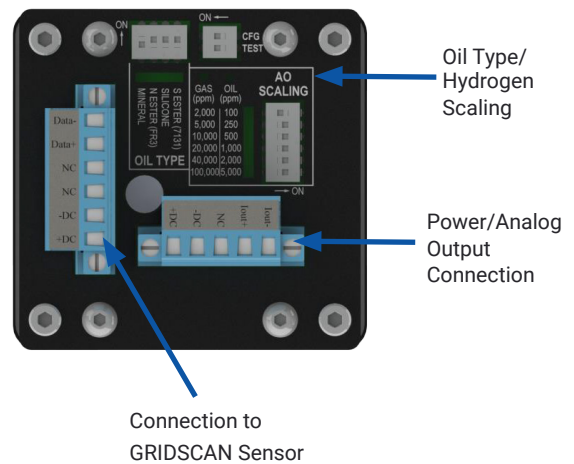
Operating Conditions

| Environmental | |
|---------------------------------|--|
| Ingress Protection | IP68 |
| Operating Temperature (Ambient) | 40°C to 70°C (104°F to 158°F) |
| Shock | 30g, shock duration, 18 ms (IEC 60068-2-27) |
| Vibration | 3-axis sinusoidal, wideband and random [simulated long-life] (IEC 60068-2-6 table C.2, IEC 60068-2-64 paragraph A.2, category no.2, IEC 61373:2010 Cat 1B section9) |
| Mechanical | |
| Dimensions H x W x D | 120 x 125 x 62 mm (4.72 x 4.92 x 2.44 in) |
| Weight | 387 g (0.85 lbs) |
| Electrical | |
| External Power Supply Required | 9, 12, 15, 24, 30, 36 or 48 VDC nominal (8.55 to 50.4 VDC) |
| Analog Output Range | Nominal 4-20mA wth over-range capability up to 24mA |
| Power Consumption | 13 W minimum (includes power for GRIDSCAN) |
| Analog Output Scaling (ppm) | 0-100, 0-250, 0-500, 0-1000, 0-2000, 0-5000 |
| Select Oil Types | Mineral oil, Natural ester oil (FR3), Silicone oil, Synthetic ester oil (7131) |
| Physical | |
| Housing | Die Cast Aluminum |
| Sealing | Housing: Gasket sealed precision die-cast housing with adhesive sealed chemically strengthened glass. Cable Glands: IP68 sized for 5-12mm (0.20-0.47 in) wire diameter. |

GSAO-1 Dimensions



Internal Wiring/Settings



Specifications are subject to change without notice.
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